

## A B S T R A C T

A DEVICE FOR MAKING THIN POWDER LAYERS, IN PARTICULAR AT HIGH TEMPERATURES, IN A PROCESS BASED ON THE ACTION OF A  
5 LASER ON A MATERIAL

The invention relates to a device serving both to lay thin layers of powder and to compact them, the device being suitable for being located inside an apparatus  
10 containing a powder or powder mixture while it is subjected to the action of a laser. The device comprises a circular cylinder (12) provided with a longitudinal groove (15) formed in an outside surface of the cylinder (12). The cylinder also has a surface (12a) adapted to  
15 compact the powder that has been deposited on a deposition zone. By moving the cylinder in rotation and translation, the powder is brought to and deposited on a tray, on which the powder is then compacted by rotating the cylinder in the opposite direction. The invention  
20 enables very thin layers of ceramic or metallic powder to be laid in accurate and uniform manner inside a sealed thermal enclosure at a temperature lying between ambient temperature and about 1200°C.

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Translation of the title and the abstract as they were when originally filed by the  
35 Applicant. No account has been taken of any changes that may have been made subsequently by the PCT Authorities acting ex officio, e.g. under PCT Rules 37.2, 38.2, and/or 48.3.